

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1544	S221 same S217	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:36
		S208 same S216	USPAT	OR	OFF	2006/03/16 17:33
		S197 same S198 same S200	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:24
		S159 same S160	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
		S157 same S141	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
		seperate same S123	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:29
		S124 same S123	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:28
		S119 same S122	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:28
		345/98.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:34
		345/204.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:00
S3	456	345/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:00

## EAST Search History

S4	142	345/80.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:00
S5	3251	345/87.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:00
S6	476	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:38
S7	7550	S1 or S2 or S3 or S4 or S5 or S6	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:00
S8	238751	multiplexer or multi-plexer or multi-plex or multiplex	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:00
S9	88784	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:01
S10	128	S7 and S8 and S9	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:05
S11	5	"664912".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:01
S12	98	lcd and S10	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:33
S13	1870494	driver or driving	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:07

## EAST Search History

S14	90	S12 and S13	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:08
S15	39344	demultiplexer or demulti-plexer or demulti-plex or demultiplex	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S16	41273	de\$multiplexer or de\$multi-plexer or de\$multi-plex or de\$multiplex	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:00
S17	14	S14 and S16	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/27 15:20
S18	5500407	second	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:00
S19	66066	multiplexers or multi-plexers or multi-plexes or multiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:00
S20	15456	de\$multiplexers or de\$multi-plexers or de\$multi-plexes or de\$multiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S21	14524	demultiplexers or demulti-plexers or demulti-plexes or demultiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S22	10247	S19 and (S20 or S21)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:28
S23	1557	345/98.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01

## EAST Search History

S24	2412	345/204.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S25	456	345/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S26	143	345/80.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S27	3263	345/87.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S28	477	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S29	7587	S23 or S24 or S25 or S26 or S27 or S28	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:01
S30	16	S29 and S22	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:06
S31	1857	S18 near S19	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:06
S32	171	S18 near (S20 or S21)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:06
S33	40	S31 and S32	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:07

## EAST Search History

S34	2202551	display\$	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:07
S35	5	S33 and S34	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/10 13:07
S36	477	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:26
S37	587	345/99.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:26
S38	1315	345/100.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S39	2119	S36 or S37 or S38	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S40	1567	345/98.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S41	2432	345/204.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S42	459	345/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S43	143	345/80.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27

## EAST Search History

S44	3279	345/87.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S45	477	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S46	7632	S40 or S41 or S42 or S43 or S44 or S45	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:27
S47	8606	S39 or S46	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S48	66374	multiplexers or multi-plexers or multi-plexes or multiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:28
S49	15549	de\$multiplexers or de\$multi-plexers or de\$multi-plexes or de\$multiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:28
S50	14603	demultiplexers or demulti-plexers or demulti-plexes or demultiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:28
S51	10309	S48 and (S49 or S50)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:28
S52	758664	buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:28
S53	238116	capacitors\$	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:30

## EAST Search History

S54	3	S47 and S52 and S53 and S51	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:30
S55	71519	"345"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:36
S56	7	S55 and S51 and S52 and S53	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:58
S57	8887245	second or two	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:02
S58	9367280	S48 near\$3 S57	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 11:58
S59	845266	"level\$shifter" or shifter or shift or shifts	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:09
S60	309911	S58 same S59	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:02
S61	1805	S47 and S60	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:02
S62	1866	second near S48	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:02
S63	8389	second near multi\$plexer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:03

## EAST Search History

S64	707	S63 same S59	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:03
S65	14	S47 and S64	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:03
S66	68897	"level\$shifter" or shifter	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:09
S67	4	dac same S66 same S48	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:10
S68	415	dac and S66 and S48	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 13:53
S69	9	S47 and S68	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:10
S70	5230073	add or additional or included	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:15
S71	6165665	S70 near\$2 S66	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:15
S72	321	S70 near S66	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:15
S73	4	S47 and S72	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 12:15



## EAST Search History

S74	1191168	positive	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 13:53
S75	1030245	negative	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 13:53
S76	89645	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 13:54
S77	57	(negative near S76) and (S74 near S76)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:32
S78	204549	lcd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 13:54
S79	10	S77 and S78	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 13:54
S80	477	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S81	587	345/99.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S82	1315	345/100.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S83	2119	S80 or S81 or S82	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09

## EAST Search History

S84	1567	345/98.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S85	2432	345/204.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S86	459	345/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S87	143	345/80.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S88	3279	345/87.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S89	477	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S90	7632	S84 or S85 or S86 or S87 or S88 or S89	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S91	8606	S83 or S90	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S92	8606	S91	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:09
S93	2	S92 and S77	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:33

## EAST Search History

S94	3069	(negative same S76) and (S74 same S76)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:32
S95	67	S91 and S94	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:42
S96	241	S78 and S94	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:43
S97	576517	driver	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 14:43
S98	151	S96 and S97	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 15:00
S99	255	S91 and S74 and S75 and S76	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 15:00
S10 0	151	S98 and S97 and S78	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:11
S10 1	6000795	less or reduce or cut or decrease	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:12
S10 2	2674282	(cost or price or ic or (integrated adj circuits\$))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:16
S10 3	504069	S101 same S102	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:49

## EAST Search History

S10 4	1191168	positive	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:16
S10 5	89645	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:16
S10 6	3069	(negative same S105) and (S104 same S105)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:45
S10 7	357	S106 and S103	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:37
S10 8	47	lcd and S107	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:33
S10 9	27	"345"/\$.cccls. and S107	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:36
S11 0	1885439	display	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:37
S11 1	143	S107 and S110	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:38
S11 2	576517	driver	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:38
S11 3	74	S111 and S112	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/27 16:38

## EAST Search History

S11 4	0	("2005/0206629").URPN.	USPAT	OR	OFF	2006/02/27 16:38
S11 5	0	("2005/0140618").URPN.	USPAT	OR	OFF	2006/02/27 16:39
S11 6	0	("2003/0132907").URPN.	USPAT	OR	OFF	2006/02/27 16:42
S11 7	0	("2003/0090451").URPN.	USPAT	OR	OFF	2006/02/27 16:42
S11 8	57	(negative near S105) and (S104 near S105)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:28
S11 9	1632132	seperate or individual	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:29
S12 0	1191839	positive	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:28
S12 1	89716	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:49
S12 2	57	(negative near S121) and (S120 near S121)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:28
S12 3	57	((negative near S121) and (S120 near S121))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:31
S12 4	1632132	(seperate or individual)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:28
S12 5	0	seperate same ((negative near S121) and (S120 near S121))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:29

## EAST Search History

S12 6	1614	S121 same polarity	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:49
S12 7	6003491	less or reduce or cut or decrease	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:49
S12 8	2675688	(cost or price or ic or (integrated adj circuits\$))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:49
S12 9	504436	S127 same S128	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 10:50
S13 0	170	S126 and S129	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:08
S13 1	3682998	data or scan	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:08
S13 2	1883944	driver or driving	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:08
S13 3	21647	S131 near S132	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:08
S13 4	828	S133 same polarity	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:09
S13 5	204726	lcd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:09

## EAST Search History

S13 6	451	S134 and S135	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:09
S13 7	1135	S133 same (polarity or (positive and negative))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/01 12:10
S13 8	561	S137 and S135	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:00
S13 9	2	"20020030653".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:06
S14 0	301617	polarity	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:00
S14 1	870150	polarity or (positive and negative)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
S14 2	0	S139 and S141	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:00
S14 3	2	"6268841".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:06
S14 4	0	S143 and S141	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:06
S14 5	0	"4571584".pn. and S141	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:07

## EAST Search History

S14 6	1	"6950045".pn. and S141	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:15
S14 7	66513	multiplexers or multi-plexers or multi-plexes or multiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:15
S14 8	15596	de\$multiplexers or de\$multi-plexers or de\$multi-plexes or de\$multiplexes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:15
S14 9	162	capacitors\$ and buffer and S147 and S148	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:24
S15 0	420	lever near shifter\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:15
S15 1	11088	level near shifter\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:15
S15 2	76185	shifter\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:16
S15 3	9	S149 and S152	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:16
S15 4	205094	lcd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 13:16
S15 5	11	S149 and S154	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:19



## EAST Search History

S15 6	7	"345"/\$.ccls. and S149	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
S15 7	1975322	switches or switch or switchs or S147	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
S15 8	1975322	(switches or switch or switchs or S147)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
S15 9	1975322	((switches or switch or switchs or S147))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:55
S16 0	870150	(polarity or (positive and negative))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:54
S16 1	91240	(switches or switch or switchs or S147) same (polarity or (positive and negative))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:55
S16 2	53777	lcd and display and (driver or driving)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:55
S16 3	1961	S161 and S162	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:55
S16 4	1583	345/98.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56
S16 5	2445	345/204.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56

## EAST Search History

S16 6	459	345/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56
S16 7	143	345/80.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56
S16 8	3284	345/87.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56
S16 9	481	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56
S17 0	7663	S164 or S165 or S166 or S167 or S168 or S169	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 09:56
S17 1	256	S170 and S163	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 10:47
S17 2	2	"20030132907".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/02 10:48
S17 3	1323	345/100.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:38
S17 4	592	345/99.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:38
S17 5	1593	345/98.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39

## EAST Search History

S17 6	2461	345/204.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S17 7	461	345/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S17 8	144	345/80.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S17 9	3299	345/87.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S18 0	483	345/90.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S18 1	7706	S175 or S176 or S177 or S178 or S179 or S180	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S18 2	8683	S173 or S174 or S181	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S18 3	602542	positive same negative	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S18 4	206595	lcd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39
S18 5	1891016	driver or driving	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:39

## EAST Search History

S18 6	828	S182 and S183 and S184 and S185	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:40
S18 7	90232	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:40
S18 8	1684	positive with S187	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:40
S18 9	1794	negative with S187	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:40
S19 0	1185	S187 and S188 and S189	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:41
S19 1	38	S186 and S188 and S189	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 11:42
S19 2	21	(US-20020030653-\$ or US-20040104873-\$ or US-20020121997-\$ or US-20050206629-\$ or US-20030227428-\$ or US-20030197672-\$ or US-20030085859-\$).did. or (US-6806859-\$ or US-6268841-\$ or US-6731170-\$ or US-6963328-\$ or US-6950045-\$ or US-6661402-\$ or US-6747637-\$ or US-4571584-\$ or US-7006072-\$ or US-6373459-\$ or US-6784866-\$ or US-6750839-\$ or US-6674420-\$ or US-6335721-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:15
S19 3	90232	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 13:17

## EAST Search History

S19 4	1684	positive with S193	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 13:17
S19 5	1794	negative with S193	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 13:17
S19 6	13	S194 and S195 and S192	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 13:17
S19 7	1888109	reduce or decrease	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:42
S19 8	90232	dac or (digital near analog near converter)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/16 17:16
S19 9	2560110	S197 near\$3 S198	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:16
S20 0	55654	(positive and negative) same S199	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:25
S20 1	54692	"345"/\$.ccls.	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:16
S20 2	346	lcd and S201 and S200	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:17
S20 3	1078	(positive and negative) with S198	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:19
S20 4	56	S202 and S203	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:24
S20 5	1299	S197 with S198	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:24
S20 6	107755	lcd	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:25
S20 7	63	S206 and S205	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:25
S20 8	634609	(positive and negative) or polarity	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:34
S20 9	36	S207 and S208	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:25
S21 0	0	("2003/0071779").URPN.	USPAT	OR	OFF	2006/03/16 17:26

## EAST Search History

S21 1	0	("2003/0071779").URPN.	USPAT	OR	OFF	2006/03/16 17:28
S21 2	922	S197 with S198	USPAT	OR	OFF	2006/03/16 17:28
S21 3	38	S212 and S206	USPAT	OR	OFF	2006/03/16 17:33
S21 4	1113774	drive or driver or driving	USPAT	OR	OFF	2006/03/16 17:28
S21 5	32	S213 and S214	USPAT	OR	OFF	2006/03/16 17:28
S21 6	1853390	S197 near\$2 S198	USPAT	OR	OFF	2006/03/16 17:34
S21 7	52246	((positive and negative) or polarity) same S216	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:37
S21 8	1591	lcd and S217	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:01
S21 9	70	S197 near S198	USPAT	OR	OFF	2006/03/16 17:34
S22 0	1	S217 and S206 and S219	USPAT	OR	OFF	2006/03/16 17:34
S22 1	1720112	((positive and negative) or polarity) near\$2 S198	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:36
S22 2	52246	S217 and S221	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:37
S22 3	1591	S222 and S206	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:37
S22 4	1205	S214 and S223	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:38
S22 5	278	S201 and S224	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:38
S22 6	3573221	reduce or decrease or cut or eliminate or lower	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:43
S22 7	212	S226 near S198	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:43
S22 8	20	S206 and S227	US-PGPUB; USPAT	OR	OFF	2006/03/16 17:43
S22 9	36	S219 and S208	US-PGPUB; USPAT	OR	OFF	2006/03/17 07:43
S23 0	1	"5170158".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/17 08:52
S23 1	5	"664912".ap.	US-PGPUB; USPAT	OR	OFF	2006/03/17 08:52